## §74.933 Remote control operation.

Licensed ITFS stations may be operated by remote control without further authority.

[52 FR 3806, Feb. 6, 1987]

## §74.934 Unattended operation.

Unattended operation of licensed ITFS stations is permitted without further authority.

(a) An unattended relay station may be employed to receive and retransmit signals of another station provided that the transmitter is equipped with circuits which permit it to radiate only when the signal intended to be retransmitted is present at the receiver input terminals.

[52 FR 3806, Feb. 6, 1987]

## §74.935 Power limitations.

- (a) The maximum equivalent isotropically radiated power (EIRP) of a transmitter station in this service shall not exceed 2000 watts (33 dBW) except as provided in paragraph (b) of this section.
- (b) If a station uses a transmitting antenna with a non-omnidirectional horizontal plane radiation pattern, the maximum equivalent isotropically radiated power (EIRP) in dBW in a given direction shall be determined by the following formula:

EIRP=33 dBW+10 log (360/beamwidth) [where 10 log (360/beamwidth)  $\leq$ 6 dB].

Beamwidth is the total horizontal plane beamwidth of the transmitting antenna system in degrees, measured at the half-power points.

(c) An increase in station transmitter power, above currently-authorized or previously-proposed values, to the maximum values provided in paragraphs (a) and (b) of this section, may be authorized, if an applicant demonstrates that the requested power increase will not cause harmful interference to any authorized or previously-proposed co-channel or adjacent-channel station with a transmitter site within 80.5 km (50 miles) of the applicant's transmitter site, or if an applicant demonstrates that:

(1) A station, that must be protected from interference, potentially could suffer interference that would be eliminated by increasing the power of the interfered-with station; and

- (2) That the interfered-with station may increase its own power consistent with the rules; and
- (3) The applicant requesting authorization of a power increase agrees to pay all expenses associated with the increase in power to the interfered-with station.
- (d) For television transmission, the peak power of the accompanying aural signal must not exceed 10 percent of the peak visual power of the transmitter. The Commission may order a reduction in aural signal power to diminish the potential for harmful interference.

[55 FR 46013, Oct. 31, 1990, as amended at 58 FR 44951, Aug. 25, 1993]

## §74.936 Emissions and bandwidth.

- (a) An instrutional television fixed station shall normally employ amplitude modulation (A5) for the transmission of the visual signal and frequency modulation (F3) for the transmission of the aural signal.
- (b) On or after November 1, 1991, the maximum out-of-band power of a transmitter operating in this service shall be attenuated 38 dB relative to the peak visual carrier at the channel edges and constant slope attenuation from this level to 60 dB relative to the peak visual carrier at 1 MHz below the lower band edge and 0.5 MHz above the upper band edge. All out-of-band emissions extending beyond these frequencies shall be attenuated at least 60 dB below the peak visual carrier power. However, should interference occur as a result of emissions outside the assigned channel, additional attenuation may be required. A transmitter licensed prior to November 1, 1991, that remains at the station site initially licensed, and does not comply with this paragraph, may continue to be used for its life if it does not cause harmful interference to the operation of any other licensee. Any non-conforming transmitter replaced after November 1, 1991, shall be replaced by a transmitter meeting the requirements of this paragraph.
- (c) The requirements of §73.687(c)(2) of this chapter will be considered to be satisfied insofar as measurements of